```
=> d que
L33                 STR
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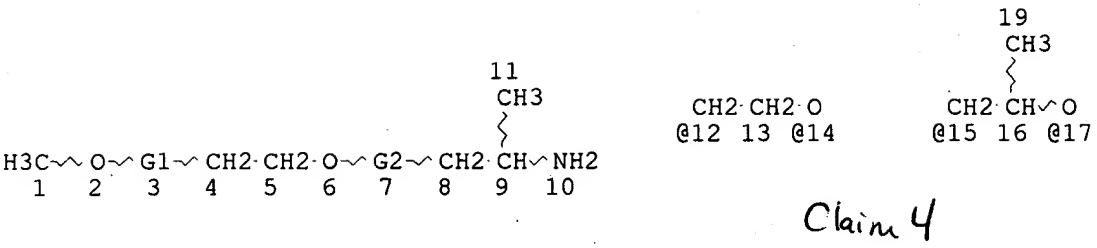

Claim 4

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REP G1=(0-10) 12-2 14-4
REP G2=(0-10) 15-6 17-8
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  18

STEREO ATTRIBUTES: NONE
L35           (4) SEA FILE=REGISTRY SSS FUL L33
L37                 STR
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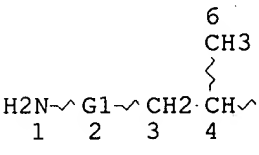
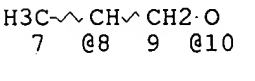
Search by SRV (Structural Repeating Units)



Claim 6

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REP G1=(1-15) 8-1 10-3
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  10

STEREO ATTRIBUTES: NONE
L39           (7) SEA FILE=REGISTRY SSS FUL L37
L43                 STR
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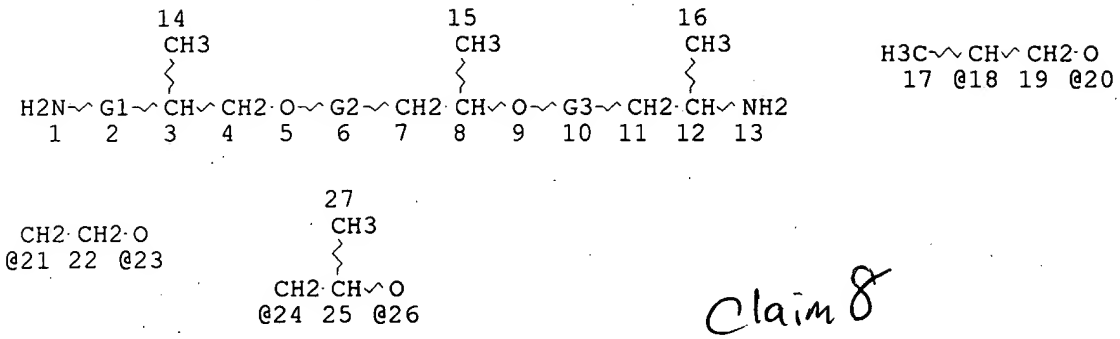
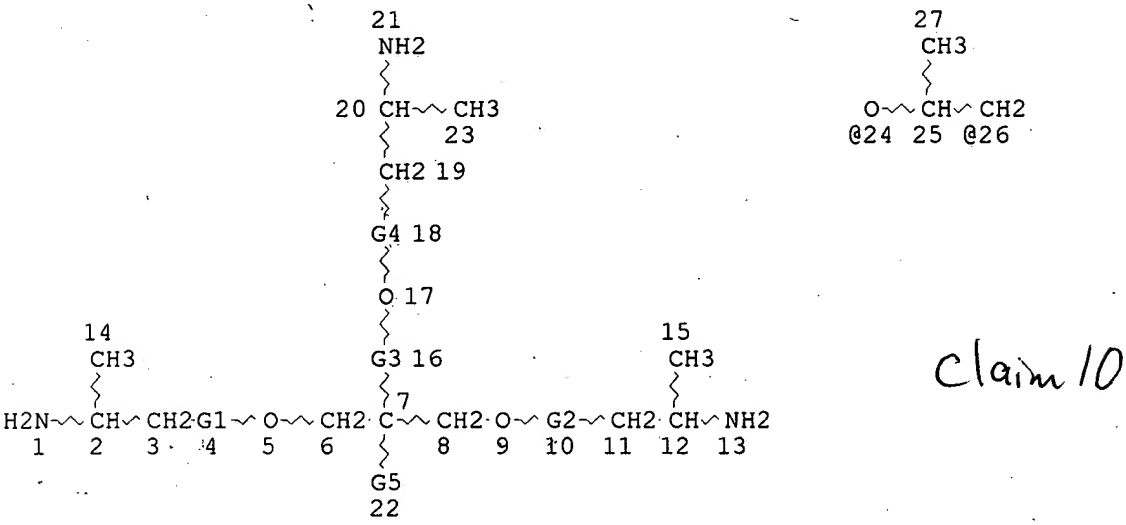


Claim 8

REP G1=(0-10) 18-1 20-3
REP G2=(0-10) 21-5 23-7
REP G3=(0-10) 24-9 26-11
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 27

STEREO ATTRIBUTES: NONE
L45 5 SEA FILE=REGISTRY SSS FUL L43
L46 STR



Claim 10

Ak @28

REP G1=(1-10) 24-3 26-5
REP G2=(1-10) 26-9 24-11
REP G3=(0-10) C
REP G4=(1-10) 26-17 24-19
VAR G5=H/28
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 28

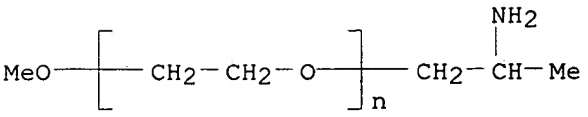
DEFAULT MLEVEL IS ATOM
GGCAT IS LOC AT 28
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 28

STEREO ATTRIBUTES: NONE
L49 0 SEA FILE=REGISTRY SSS FUL L46
L50 18 SEA FILE=HCAPLUS ABB=ON PLU=ON L35 OR L39 OR L45 OR L49

=> d ibib abs hitstr l50 1-18

L50 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2003:3622 HCAPLUS
DOCUMENT NUMBER: 138:222157
TITLE: Modification of poly(octadecene-alt-maleic anhydride) films by reaction with functional amines
AUTHOR(S): Schmidt, Ute; Zschoche, Stefan; Werner, Carsten
CORPORATE SOURCE: Institute of Polymer Research Dresden and Max Bergmann Center of Biomaterials Dresden, Dresden, D-01069, Germany
SOURCE: Journal of Applied Polymer Science (2003), 87(8), 1255-1266
CODEN: JAPNAB; ISSN: 0021-8995
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Thin films of poly(octadecene-alt-maleic anhydride) on top of Si wafers and glass plates were modified by reactions with different functional amines to be used in future studies on the relevance of certain mol. surface properties for the covalent immobilization of proteins. For that aim, a strategy was developed and applied to convert the anhydride moieties of the copolymer by functional amines into side chains bearing hydrophilic groups of acidic (carboxylic acid, sulfonic acid), basic (amines), or neutral (poly(ethylene oxide) (PEO), glucose) character. The modification of the copolymer films was achieved through the two-step formation of a cyclic imide, which was very stable in aq. soln. Depending on the reactivity of the applied amine, the adjustment of the reaction time was suitable for the prepn. of partially converted surfaces of the polymer film. Degrees of modification between 5 and 30% (according to XPS data) were obtained. Annealing the modified polymer films induced efficient back-formation of the anhydride groups. By reaction of the layered polyanhydrides with highly crosslinked diamines, amine-functionalized polymer films were produced that were capable of binding secondary polyanhydride layers.
IT **182232-65-1DP**, reaction product with maleic anhydride-octadecene alternating copolymer
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(modification of poly(octadecene-alt-maleic anhydride) films by reaction with functional amines)
RN 182232-65-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-(2-aminopropyl)-.omega.-methoxy- (9CI) (CA INDEX NAME)

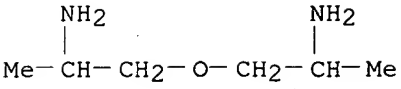


REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:628975 HCAPLUS
DOCUMENT NUMBER: 137:326061
TITLE: Novel non-exfoliated clay-nanocomposite materials by in situ co-polymerization of intercalated monomers: a combinatorial discovery approach
AUTHOR(S): Coveney, P. V.; Griffin, J. L. W.; Watkinson, M.; Whiting, A.; Boek, E. S.
CORPORATE SOURCE: Centre for Computational Science, Department of Chemistry, Queen Mary, University of London, London, E1 4NS, UK
SOURCE: Molecular Simulation (2002), 28(3), 295-316
CODEN: MOSIEA; ISSN: 0892-7022
PUBLISHER: Taylor & Francis Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB We report the synthesis and qual. testing of a novel class of clay nanocomposite materials made by the in situ copolymn. of small intercalating monomer mols. using combinatorial-style diversity methods. Initial screening was undertaken by treating montmorillonite clay films with combinations of selected additives in aq. soln. The treated films were assessed for their stability in a qual. manner based on their response to water. The mech. strength of these films was also assessed qual. Promising "lead" formulations showed no signs of water-induced swelling and/or exfoliation, while also being flexible and hard. In addn., the interlamellar d-spacings in the treated clay films were measured using X-ray diffraction, where possible; the value of the d-spacing in the treated clays was found to vary significantly, from 12.7-17.7 .ANG.. The lead formulations were then tested on bulk montmorillonite clay, confirming that the thin film behavior was representative of that of the bulk. Direct anal. of the treated clays by mass spectrometry using both FAB and MALDITOF did not provide any useful information. However, when the clays were subjected to extn. using chloroform, clear evidence of higher relative mol. mass species was forthcoming, confirming that polymn. of the additives was occurring. Further supporting evidence was obtained by solid-state NMR anal. of treated iron-free (laponite) clay samples, which also revealed extensive polymn. of the monomers used. Comparison of these data with the results of some simple mol. modeling studies indicates that polymn. is indeed occurring within the clay galleries.

IT **3768-47-6**
RL: PRP (Properties)
(non-exfoliated clay-nanocomposite materials by in situ co-polymn. of intercalated monomers)
RN 3768-47-6 HCAPLUS
CN 2-Propanamine, 1,1'-oxybis- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:241061 HCAPLUS
DOCUMENT NUMBER: 136:264486
TITLE: Cobalt phthalocyanines, their production and their use in data storage optically writable information layers
INVENTOR(S): Stawitz, Josef-Walter; Berneth, Horst; Bieringer, Thomas; Bruder, Friedrich-Karl; Hagen, Rainer; Hassenrueck, Karin; Kostromine, Serguei; Oser, Rafael
PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Germany
SOURCE: PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 14
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002025205	A1	20020328	WO 2001-EP10427	20010910
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10115227	A1	20021219	DE 2001-10115227	20010328
DE 10124585	A1	20020502	DE 2001-10124585	20010521
AU 2001085943	A5	20020402	AU 2001-85943	20010910
US 2002155381	A1	20021024	US 2002-102586	20020320
WO 2002086878	A2	20021031	WO 2002-EP3071	20020320
WO 2002086878	A3	20030227		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.:
DE 2000-10046771 A 20000921
DE 2001-10115227 A 20010328
DE 2001-10124585 A 20010521
WO 2001-EP10427 W 20010910

OTHER SOURCE(S): MARPAT 136:264486

AB The invention relates to an optical data support which can be written once, to the use of Co phthalocyanine complexes as light-absorbing compds. in the optically writable information layer of optical data supports, esp. for CD-Rs, and to the application of these compds. to a polymer substrate, esp. a polycarbonate, by spin coating. In an example, Co phthalocyanine was treated with chlorine and H2N(CH2)3NMe(CH2)2OH to give an amine complex chloride (.lambda.max 670 nm).

IT **405268-34-0P**

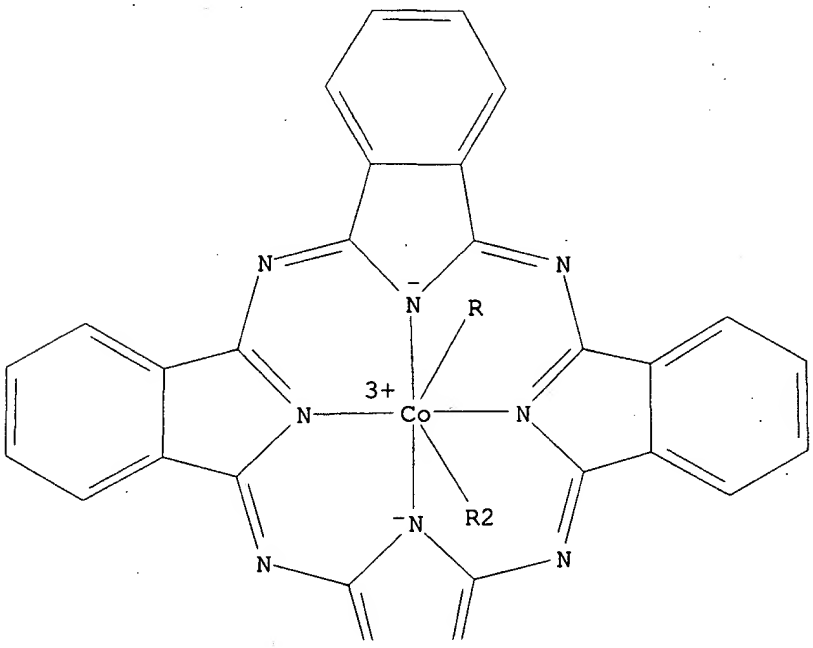
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(prodn. of cobalt phthalocyanines for use in data storage optically writable information layers)

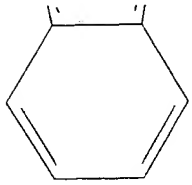
RN 405268-34-0 HCAPLUS

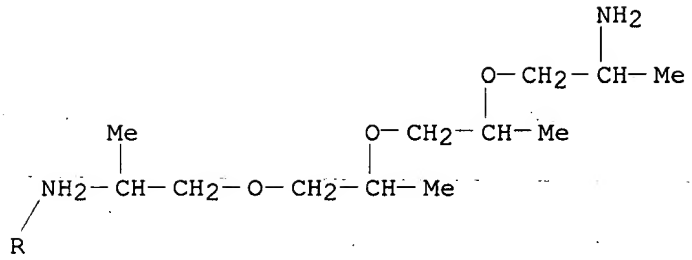
CN Cobalt(1+), bis[1-[2-[2-(2-aminopropoxy)propoxy]propoxy]-2-propanamine-.kappa.N][29H,31H-phthalocyaninato(2-)-.kappa.N29,.kappa.N30,.kappa.N31,.kappa.N32]-, chloride, (OC-6-12)- (9CI) (CA INDEX NAME)

PAGE 1-A

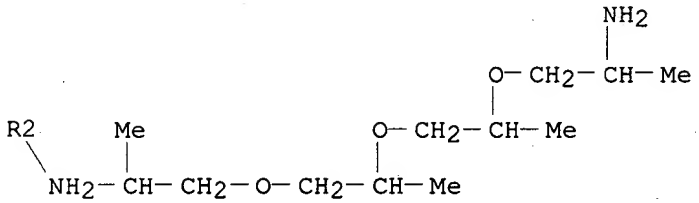


PAGE 2-A

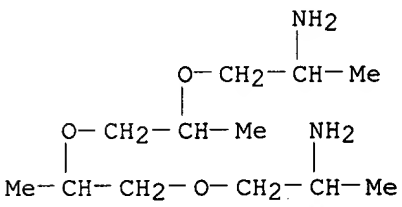




PAGE 3-A



IT **27918-22-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; prodn. of cobalt phthalocyanines for use in data storage optically writable information layers)
RN 27918-22-5 HCAPLUS
CN 2-Propanamine, 1-[2-[2-(2-aminopropoxy)-1-methylethoxy]-1-methylethoxy]-(9CI) (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L50 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:802948 HCAPLUS
DOCUMENT NUMBER: 132:51151
TITLE: Unsymmetrical dioxazine compounds for dyeing of fabric
INVENTOR(S): Tatsuma, Masahiko; Sekiya, Junichi
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11349837	A2	19991221	JP 1998-159256	19980608

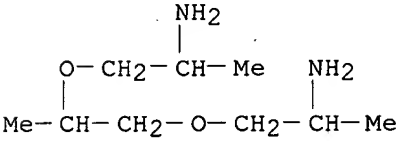
PRIORITY APPLN. INFO.: JP 1998-159256 19980608
OTHER SOURCE(S): MARPAT 132:51151
GI

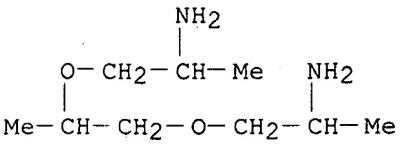
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title unsym. dioxazine compds., in the form of free acids, have general structure I or II [R1, R2 = H, (substituted) lower alkyl; B = bivalent group; n = 0, 1; X1 = halogen, (substituted) pyridinio, NR3W1SO2Y1, NR4W2(SO2Y1)(SO2Y2), NR5W3NHCOY3, III; X2, X3 = halogen, OH, (substituted) pyridinio, (substituted) alkoxy, (substituted) phenoxy, (substituted) amino, NR3W1SO2Y1, NR4W2(SO2Y1)(SO2Y2), NR5W3NHCOY3, III; W1, W3 = bivalent group; W2 = trivalent group; Y1, Y2 = CH:CH2, CH2CH2Z1; Z1 = elimination group upon treating with base; Y3 = CZ2:CH2, CHZ2CH2; Z2 = Cl, Br; R3 = H, (substituted) lower alkyl, (substituted) Ph, W1SO2Y1; R4, R5 = H, (substituted) lower alkyl; D1, D2 = IV; T1, T2 = H, Cl, Br, lower alkyl, lower alkoxy, phenoxy; A1 = lower alkyl, lower alkoxy, Cl, Br, carboxyl; A2 = H, lower alkyl, lower alkoxy, Cl, Br, carboxyl; R6 = H, (substituted) lower alkyl; D3 = pyrimidine-type fiber-reactive group, V; X4, X5 = halogen, OH, (substituted) pyridinio, (substituted) alkoxy, (substituted) phenoxy, (substituted) amino, NR3W1SO2Y1, NR4W2(SO2Y1)(SO2Y2), NR5W3NHCOY3, III].

IT **22501-88-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of unsym. dioxazine compds. for dyeing of fabric)

RN 22501-88-8 HCAPLUS
CN 2-Propanamine, 1,1'-[(1-methyl-1,2-ethanediyl)bis(oxy)]bis- (9CI) (CA INDEX NAME)



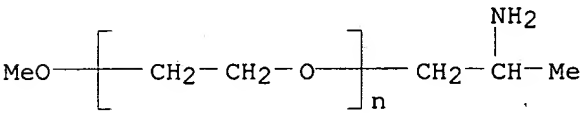


L50 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:545857 HCAPLUS
DOCUMENT NUMBER: 129:291183
TITLE: Water-thinned coatings prepared by modification with epoxy resins
AUTHOR(S): Klein, Howard P.
CORPORATE SOURCE: Huntsman Corp., Austin, USA
SOURCE: JETI (1998), 46(9), 83-87
CODEN: JETIEE; ISSN: 0289-4343
PUBLISHER: Jeti
DOCUMENT TYPE: Journal
LANGUAGE: Japanese

AB Water-thinned epoxy coating formulations were prepd. using liq. epoxy resin adducts (EA) and were demonstrated useful for cured film formation. A series of EA were prepd. by heating of MeO(CH2CHRO)nCH2CHMeNH2 (R = H, Me, mol. wt. 1000-2000) with epoxy resin (epoxy equiv 185-190) (1:2-20) at 80-120.degree. for 2 h.

IT **182232-65-1D**, reaction products with epoxy resins
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
(water-thinned coatings prepd. by modification with epoxy resins)

RN 182232-65-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-(2-aminopropyl)-.omega.-methoxy- (9CI) (CA INDEX NAME)



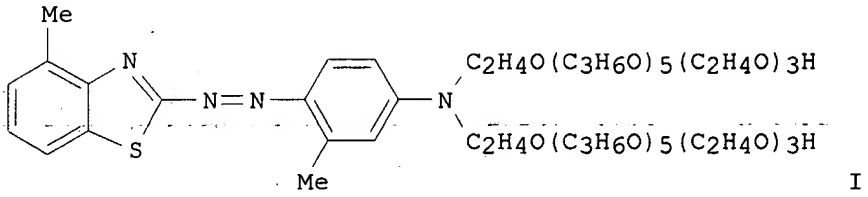
L50 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:783695 HCAPLUS
DOCUMENT NUMBER: 128:48996
TITLE: Black colorant compositions exhibiting low flairing for polyurethane foams
INVENTOR(S): Ragsdale, Mark Edward; Moody, David Jesse; Stephens, Eric B.
PATENT ASSIGNEE(S): Milliken Research Corp., USA
SOURCE: Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

EP 810266	A2	19971203	EP 1997-303629	19970529
EP 810266	A3	19981216		
EP 810266	B1	20010620		
R: BE, DE, ES, FR, GB, IT				
US 5731398	A	19980324	US 1996-657022	19960531
JP 10081834	A2	19980331	JP 1997-144336	19970602
US 5925150	A	19990720	US 1997-915147	19970820

PRIORITY APPLN. INFO.: US 1996-657022 A 19960531

GI



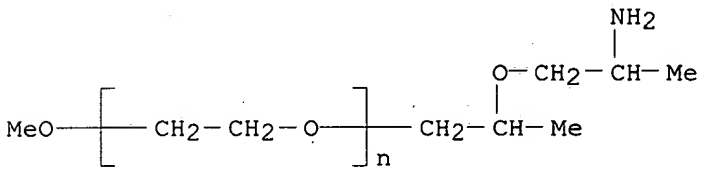
I

AB The title compns. contain a red benzothiazole azo colorant which, when combined with a complementary blue and yellow colorant, exhibits low flairing. To 100 parts ether triol (mol. wt. 3000) was added 1 part of 31.1:24.4:44.5 mixt. of red I, yellow p-trans-EtOCOC(CN):CHC6H4N[C2H4O(C3H6O)7.5(C2H4O)2.5H]2, and blue [p-[H(C2H4O)2.5(C3H6O)7.5C2H4O]2C6H4]2C+C6H4SO3--o, followed by mixing with water 4.53, silicone surfactant 1, stannous octoate 0.15, triethylenediamine 0.05, and TDI 58.8 parts to obtain a black foam with d. 1.5 lb/ft3.,.

IT **199874-74-3D**, reaction products with copper phthalocyaninetetrasulfonic acid
RL: TEM (Technical or engineered material use); USES (Uses)
(black colorant compns. exhibiting low flairing for polyurethane foams)

RN 199874-74-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[2-(2-aminopropoxy)propyl]-.omega.-methoxy- (9CI) (CA INDEX NAME)



L50 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:715880 HCAPLUS

DOCUMENT NUMBER: 128:14364

TITLE: Polyoxyalkylene aminoalkyl ethers as dispersing aids and solid dispersion compositions containing them with storage stability for long periods

INVENTOR(S): Akiyama, Takeo; Watanabe, Shinya

PATENT ASSIGNEE(S): Konica Co., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

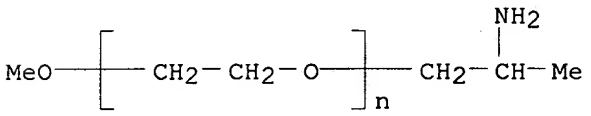
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09285726	A2	19971104	JP 1996-101254	19960423
US 5942368	A	19990824	US 1997-844928	19970422

PRIORITY APPLN. INFO.: JP 1996-101254 19960423
JP 1996-101255 19960423
JP 1996-196433 19960725

AB The agents consist of R1O(R2)mCH2CHR3NR4R5 [R1 = H, C1-30 (substituted) linear or branched alkyl, (substituted) alicyclic hydrocarbon group, arom. hydrocarbon group, heterocycle; m .gtoreq.0; R2 = [CH2CH(R6)O]; R4, R5 = [CH2CH(R7)N(R8)]nR9; R3, R6, and R7-R9 are same as R1]. The dispersing aids show improved compatibility to various materials, and solid compns. (e.g., pigments or dyes) contain the aids. Thus, 30 parts MA 100 (carbon black) was mixed with 6 parts 32:12 mixt. of MeO(CH2CH2O)42CH2CHMeNH2 and MeO(CH2CHMeO)42CH2CHMeNH2 in 64 parts MEK in a container to give a dispersion of particle size 154 nm initially and 162 nm on keeping the dispersion for 6 mo.

IT **182232-65-1**
RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(polyoxyalkylene aminoalkyl ethers as dispersing aids for solid dispersion compns. with storage stability for long periods)

RN 182232-65-1 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), .alpha.-(2-aminopropyl)-.omega.-methoxy- (9CI) (CA INDEX NAME)



L50 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:630259 HCAPLUS
DOCUMENT NUMBER: 125:269871
TITLE: Polymer compositions and methods for directed ultrasound imaging
INVENTOR(S): Quay, Steven C.; Marrs, Christopher M.; Worah, Dilip M.
PATENT ASSIGNEE(S): Sonus Pharmaceuticals, Inc., USA
SOURCE: Eur. Pat. Appl., 18 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

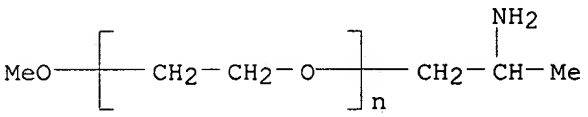
EP 727225	A2	19960821	EP 1996-630007	19960208
EP 727225	A3	19970115		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 08325165	A2	19961210	JP 1996-52387	19960214
PRIORITY APPLN. INFO.:			US 1995-388468	19950214
			US 1995-471568	19950606

AB Compns. for enhancing the ability to target gaseous microbubbles used in ultrasound contrast are described. The compns. include a cell adhesion mol. ligand which is incorporated into a desired mol. to form a conjugate. When the contrast agent is a colloidal dispersion, the conjugate is formed with a surfactant. When the agent is a solid microsphere, the conjugate is formed with a portion of the solid. Once the conjugate is formed, the surfactant or microsphere will adhere to the surface of desired target cells by coupling of the CAM ligand to cell adhesion mols. expressed on the cell surface. Thus, Jeffamine M-2070 was allowed to react with Sialyl Lewis X in the presence of NaCNBH3 and the product formed was uses in compns. and.

IT **182232-65-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(polymer compns. for directed ultrasound imaging)

RN 182232-65-1 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-(2-aminopropyl)-.omega.-methoxy- (9CI) (CA INDEX NAME)



L50 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1995:634218 HCAPLUS

DOCUMENT NUMBER: 123:285149

TITLE: A synthesis of homochiral 1,5-dialkyl-1,5-diamino-3-oxapentanes

AUTHOR(S): Ochoa, Ana; Dobarro, Alicia; Marti, Josep; Lopez-Claahorra, Francisco

CORPORATE SOURCE: Dep. Quimica Organica, Univ. Barcelona, Barcelona, E-08028, Spain

SOURCE: Synthetic Communications (1995), 25(15), 2217-22
CODEN: SYNCAV; ISSN: 0039-7911

PUBLISHER: Dekker

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 123:285149

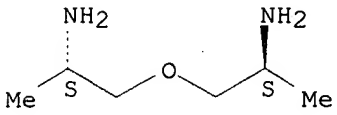
AB A synthesis of (R,R)- or (S,S)-1,5-dialkyl-1,5-diamino-3-oxapentanes from com. 2-alkyl-2-aminoethanols, in a quant. "one pot" process in the key step, is described.

IT **169331-23-1P**, (S,S)-1,5-Methyl-1,5-diamino-3-oxapentane
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of homochiral 1,5-dialkyl-1,5-diamino-3-oxapentanes)

RN 169331-23-1 HCAPLUS

CN 2-Propanamine, 1,1'-oxybis-, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

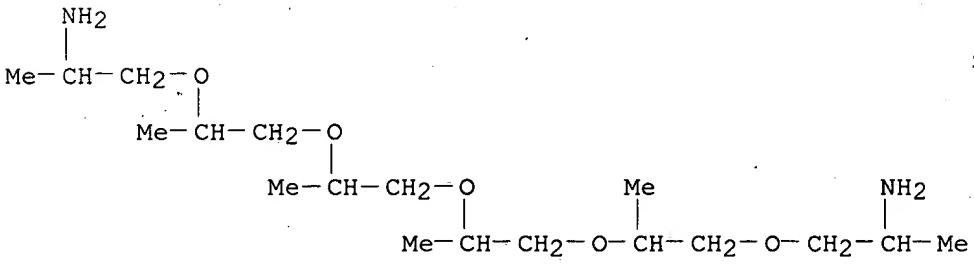


L50 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:328392 HCAPLUS
DOCUMENT NUMBER: 122:132230
TITLE: Oxidative Carbonylation of Aliphatic Mono-, Di-, and Triamines Catalyzed by Montmorillonite-Bipyridinylpalladium(II) Acetate
AUTHOR(S): Valli, V. L. K.; Alper, Howard
CORPORATE SOURCE: Ottawa-Carleton Chemistry Institute, University of Ottawa, Ottawa, ON, K1N 6N5, Can.
SOURCE: Organometallics (1995), 14(1), 80-2
CODEN: ORGND7; ISSN: 0276-7333
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A simple, efficient, and highly selective non-phosgene route has been developed for the prepn. of aliph., alicyclic, and/or arom. mono-, di-, and triurethanes from the corresponding amines using montmorillonite-bipyridinylpalladium(II) acetate (Pd-Clay) in the presence of NaI as a promoter. The catalytic activity of other palladium catalysts was studied and compared with Pd-Clay. The difference in reactivity, as well as the selectivity between the immobilized palladium catalyst, i.e., Pd-Clay, and the homogeneous catalyst systems is accounted for in terms of the position and the electronic environment of the metal in the interlayers of the clay system surrounded by the surface Bronsted acidic sites. The versatility of the present catalytic system was demonstrated by the synthesis of com. important isocyanate precursors, including those of Dytek-A-diurethane and isophorone diurethane.

IT **40389-31-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(oxidative carbonylation of aliph. mono-, di-, and triamines catalyzed by montmorillonite-bipyridinylpalladium acetate complex)

RN 40389-31-9 HCAPLUS
CN 4,7,10,13,16-Pentaoxanonadecane-2,18-diamine, 6,9,12,15-tetramethyl- (9CI) (CA INDEX NAME)



L50 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:255796 HCAPLUS
DOCUMENT NUMBER: 122:118847
TITLE: Method of processing silver halide photographic material containing hydrazine with amine-containing developer solution
INVENTOR(S): Kato, Mariko; Ishikawa, Wataru; Sanpei, Takeshi
PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

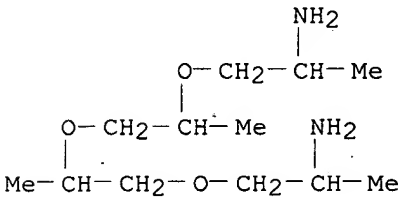
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06250348	A2	19940909	JP 1993-36906	19930225

PRIORITY APPLN. INFO.: JP 1993-36906 19930225

AB The claimed method comprises using a developer soln. consisting of (1) dihydroxybenzene, (2) deriv. of 3-pyrazolidone or aminohenol, (3) .gtoreq.0.3 mol/L of sulfite, (4) amine compd. R1R2CHANR3R4 and R3R4NANR5R6 (R1 = H, OH, carboxy; R2, R3, R4, R5, R6 = H, monovalent org. group; A = bivalent group; when R3 and R4 are Et, R1 .noteq. OH; R3 and R5, and R4 and R6 may be combined to form heterocyclic rings), and (5) a mercapto or thion-substituted N-contg. heterocyclic compd having no benzo form condensed ring. The developer soln. does not generate silver sludge and reduces black peppers. It has high speed and good stability and provides high contrast images.

IT **27918-22-5**
RL: MOA (Modifier or additive use); NUU (Other use, unclassified); USES (Uses)
(photog. developer contg. amine and sulfur-contg. azocyclic compd.)

RN 27918-22-5 HCAPLUS
CN 2-Propanamine, 1-[2-[2-(2-aminopropoxy)-1-methylethoxy]-1-methylethoxy]-(9CI) (CA INDEX NAME)

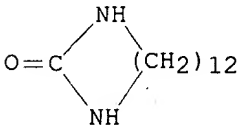


L50 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:560330 HCAPLUS
DOCUMENT NUMBER: 119:160330
TITLE: Two-step method for preparing macrocyclic ureas
INVENTOR(S): Speranza, George P.; Champion, Donald H.
PATENT ASSIGNEE(S): Texaco Chemical Co., USA
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5206362	A	19930427	US 1992-837131	19920219
CA 2078353	AA	19930820	CA 1992-2078353	19920916
EP 558189	A1	19930901	EP 1993-300720	19930201
R: DE, FR, GB				
JP 06025191	A2	19940201	JP 1993-53254	19930219

PRIORITY APPLN. INFO.: US 1992-837131 19920219
OTHER SOURCE(S): CASREACT 119:160330; MARPAT 119:160330
GI

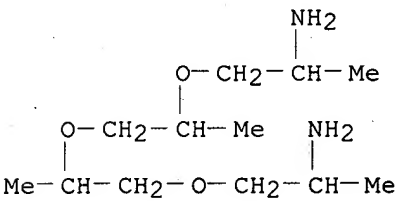


I

AB Large-ring cyclic ureas are prepd. in an efficient and cost-effective means by heating .apprx.1 mol of a diamine (having 8-22 C atoms between the NH2 groups) with 1 mol of urea at 120-140.degree. until 1 mol of NH3 is liberated, and then heating the intermediate condensation product with either an alc. or glycol ether solvent at 160-200.degree.. Thus, 1,12-diaminododecane was dissolved in 2-ethylhexanol, urea added, the mixt. heated to 127.degree. for 3 h, addnl. 2-ethylhexanol added, the reaction mixt. heated to 105.degree., and heated at 185.degree. for 4 h, producing macrocyclic urea I (m.p. 207-213.degree.).

IT **27918-22-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with urea)

RN 27918-22-5 HCAPLUS
CN 2-Propanamine, 1-[2-[2-(2-aminopropoxy)-1-methylethoxy]-1-methylethoxy]-(9CI) (CA INDEX NAME)



L50 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1991:229395 HCAPLUS
DOCUMENT NUMBER: 114:229395
TITLE: Preparation of new substituted alkylamide derivatives of teicoplanin as antibacterials
INVENTOR(S): Malabarba, Adriano; Seneci, Pierfausto; Kettenring,

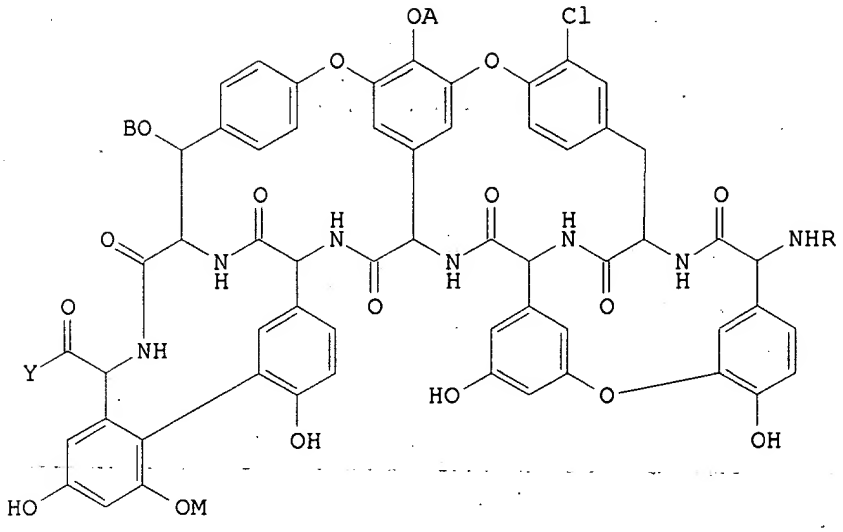
	Juergen Kurt; Ciabatti, Romeo
PATENT ASSIGNEE(S):	Gruppo Lepetit S.p.A., Italy
SOURCE:	PCT Int. Appl., 98 pp.
	CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1
PATENT INFORMATION:	

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9011300	A1	19901004	WO 1990-EP400	19900313
W: AU, CA, FI, HU, JP, KR, NO, SU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
ZA 9001881	A	19901228	ZA 1990-1881	19900312
IL 93716	A1	19941021	IL 1990-93716	19900312
CA 2046880	AA	19900930	CA 1990-2046880	19900313
CA 2046880	C	20011204		
AU 9051883	A1	19901022	AU 1990-51883	19900313
AU 638977	B2	19930715		
EP 465481	A1	19920115	EP 1990-904339	19900313
EP 465481	B1	19931118		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
HU 58350	A2	19920228	HU 1990-2355	19900313
HU 217074	B	19991129		
JP 04504251	T2	19920730	JP 1990-504214	19900313
JP 2833716	B2	19981209		
AT 97422	E	19931215	AT 1990-904339	19900313
ES 2060149	T3	19941116	ES 1990-904339	19900313
RU 2078768	C1	19970510	RU 1990-5001791	19900313
CN 1045976	A	19901010	CN 1990-101759	19900329
NO 9103764	A	19910925	NO 1991-3764	19910925
US 5500410	A	19960319	US 1995-461208	19950605

PRIORITY APPLN. INFO.:	EP 1989-105525	A	19890329
	EP 1990-904339	A	19900313
	WO 1990-EP400	A	19900313
	US 1991-761806	B1	19910920
	US 1994-263160	B1	19940620

OTHER SOURCE(S): MARPAT 114:229395

GI



I

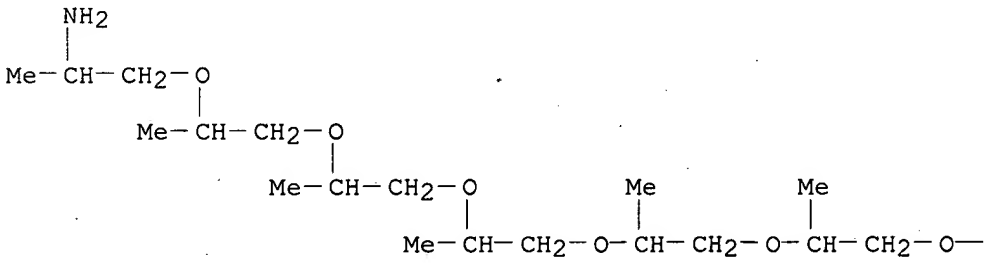
AB The title compds. [I; R = H, protecting group; Y = NR1X1(XX2)p(TX3)qW; R1 = H, alkyl; T, X = O, (substituted) imino; X1, X2, X3 = C2-10 alkylene; W = OH, amino; p = 1-50; q = 0-12; A = H, N-acylated .beta.-D-2-deoxy-2-aminoglucopyranosyl; B = H, N-acetyl-.beta.-D-2-deoxy-2-aminoglucopyranosyl; M = H, .alpha.-D-mannopyranosyl; B = H only when both A, M = H], were prepd. Thus, teicoplanin A1 component 2 in ET3N/DMF was treated with PhCH2O2CCl in acetone to give .apprx.96% of the N-15 CBZ deriv. This was esterified with ClCH2CN in DMF/Et3N in .apprx.98% yield and the ester was treated with H2N(CH2)2NH(CH2)2NH2 in DMF followed by hydrogenolysis to give I [A = N-(8-methylnonanoyl)-.beta.-D-2-deoxy-2-aminoglucopyranosyl, B = N-acetyl-.beta.-D-2-deoxy-2-aminoglucopyranosyl, M = .alpha.-D-mannopyranosyl, Y = H2NCH2CH2NHCH2CH2NH, R = H] (II). II had an ED50 of 0.09 mg/kg s.c. against Streptomyces pyrogenes C203 in mice. Several I were active against multi-resistant Pseudomonas aeruginosa with MIC of 4-128 .mu.g/mL.

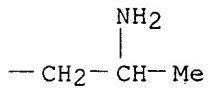
IT **40389-56-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(amidation by, of teicoplanin deriv., in prepn. of antibacterial)

RN 40389-56-8 HCAPLUS

CN 4,7,10,13,16,19-Hexaoxadocosane-2,21-diamine, 6,9,12,15,18-pentamethyl- (9CI) (CA INDEX NAME)

PAGE 1-A





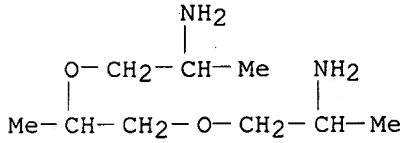
L50 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1989:617104 HCAPLUS
DOCUMENT NUMBER: 111:217104
TITLE: Methods and composition for deactivating iron in hydrocarbon fluids
INVENTOR(S): Roling, Paul V.; Niu, Joseph H. Y.
PATENT ASSIGNEE(S): Betz Laboratories, Inc., USA
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4847415	A	19890711	US 1988-201655	19880601
US 4883580	A	19891128	US 1989-338018	19890414
CA 1322557	A1	19930928	CA 1989-596890	19890417

PRIORITY APPLN. INFO.: US 1988-201655 19880601
OTHER SOURCE(S): MARPAT 111:217104

AB Certain Mannich reaction products, i.e., alkylated phenol, polyoxyalkylenediamine, and an aldehyde, e.g., 4-nonylphenol-triethylene glycol diamine-paraformaldehyde reaction product, are used to deactivate Fe species present in hydrocarbon fluids. Left untreated, such Fe species lead to decompn. resulting in the formation of gummy, polymer masses in the hydrocarbon liq.

IT **22501-88-8D**, Mannich reaction products with alkylated phenol and aldehyde
RL: USES (Uses)
(iron deactivators, for hydrocarbon fluids, for fouling prevention)
RN 22501-88-8 HCAPLUS
CN 2-Propanamine, 1,1'-[(1-methyl-1,2-ethanediyl)bis(oxy)]bis- (9CI) (CA INDEX NAME)



L50 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1986:478530 HCAPLUS
DOCUMENT NUMBER: 105:78530
TITLE: N-(Substituted alkyl)dichloroacetamide derivatives
INVENTOR(S): Durr, Dieter; Fory, Werner
PATENT ASSIGNEE(S): Ciba-Geigy A.-G. , Switz.
SOURCE: Eur. Pat. Appl., 56 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: Czech
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

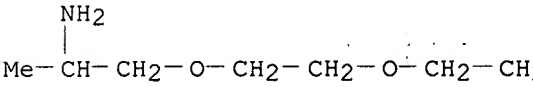
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 174278	A1	19860312	EP 1985-810392	19850828
EP 174278	B1	19890419		
R: BE, CH, DE, FR, GB, IT, LI, NL				
ZA 8506701	A	19860430	ZA 1985-6701	19850902
JP 61065854	A2	19860404	JP 1985-194705	19850903

PRIORITY APPLN. INFO.: CH 1984-4202 19840903

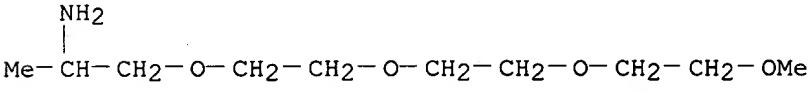
AB The title compds. Cl2CHCONR(ZO)m(Z1O)n(Z2O)o(Z3O)pR1 (R = H, CH2Ph, CH2CH:CH2, CH2C.tplbond.CH, Pr, etc.; R1 = alkyl, CH2C.tplbond.CH, CH2Ph, etc.; Z, Z1, Z2, Z3 = alkylene; m = 1-5; n, o, p = 0-3) are prepd. as herbicide safeners. Thus, BuOCH2CH2OCH2CH2Cl (prepd. from BuOCH2CH2OCH2CH2OH and SOCl2) was reacted with NH3 under pressure at 130.degree. for 15 h to give BuOCH2CH2OCH2CH2NH2. This was heated with Cl2CHCOCl in MePh, in the presence of Et3N, to give BuOCH2CH2OCH2CH2NHCOCHCl2 (I). I (1.5 kg/ha) gave 50% protection of corn against the phytotoxicity of 2-chloro-N-(2-ethyl-6-methylphenyl)-N-(2-methoxy-1-methylethyl)acetamide (8 kg/ha) in preemergent pot expts.

IT **103448-00-6P 103448-01-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and dichloroacetylation of)

RN 103448-00-6 HCAPLUS
CN 2-Propanamine, 1-[2-(2-methoxyethoxy)ethoxy]- (9CI) (CA INDEX NAME)



RN 103448-01-7 HCAPLUS
CN 2,5,8,11-Tetraoxatetradecan-13-amine (9CI) (CA INDEX NAME)



L50 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1973:124088 HCAPLUS

DOCUMENT NUMBER: 78:124088
TITLE: Poly(oxyalkylene) bisthiourea as extreme-pressure lubricants in metal-working fluids
INVENTOR(S): Kmet, Thomas J.; Loboda, Jon A.
PATENT ASSIGNEE(S): Richardson Co.
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3704321	A	19721128	US 1971-146535	19710524
US 3798164	A	19740319	US 1972-289203	19720914

PRIORITY APPLN. INFO.: US 1971-146535 19710524

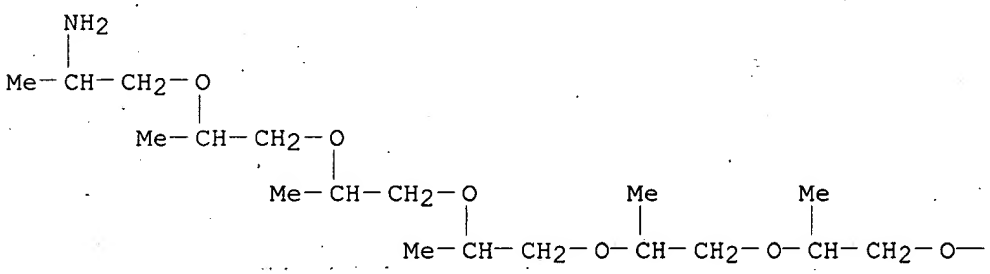
AB Title compds. RNHC(S)NHCHR1CH2(OCH2CHR1)nNHC(S)- NHR2 (I) were prepd. from the corresponding polyether diamines and an isothiocyanate. Thus, 37 g MeNCS in 75 ml Me2CHOH was added over 45 min (exotherm) to 52.1 g H2NCHMeCH2(OCH2CHMe.cntdot.)5.6NH2 in 120 ml Me2CHOH and the mixt. refluxed to give I (R = R1 = R2 = Me, n = 5.6). Metal-working compns. were prepd.

IT **40389-56-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

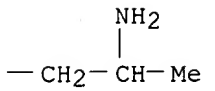
RN 40389-56-8 HCAPLUS

CN 4,7,10,13,16,19-Hexaoxadocosane-2,21-diamine, 6,9,12,15,18-pentamethyl- (9CI) (CA INDEX NAME)

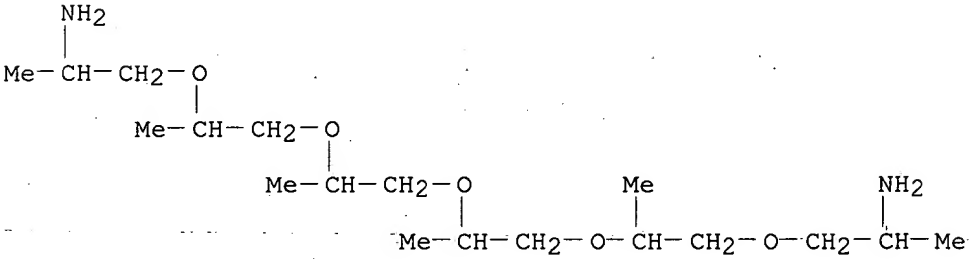
PAGE 1-A



PAGE 1-B



IT **40389-31-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with methyl isothiocyanate)
RN 40389-31-9 HCAPLUS
CN 4,7,10,13,16-Pentaoxanonadecane-2,18-diamine, 6,9,12,15-tetramethyl- (9CI) (CA INDEX NAME)



L50 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1969:450809 HCAPLUS
DOCUMENT NUMBER: 71:50809
TITLE: Poly(oxyalkylene) polyamines
INVENTOR(S): Yeakey, Ernest L.; Carlson, Shelton D.
PATENT ASSIGNEE(S): Jefferson Chemical Co., Inc.
SOURCE: Fr., 6 pp.
CODEN: FRXXAK
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 1547228		19681122		
PRIORITY APPLN. INFO.:			US	19661216

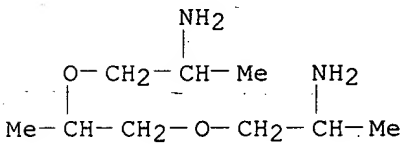
AB Polypropylene glycol, tripropylene glycol, ethylene oxide-propylene oxide copolymers, and various addn. products of tripropylene glycol and glycerol are passed, with NH3 and H, over a reduced 2:23:75 (at. ratio) Cr-Cu-Ni hydrogenation catalyst at 215-50.degree./170-204 atm. to prep. good yields of poly(oxyalkylene)polyamines by the replacement of the OH groups of the starting compds. with amine groups. This amination method gives higher yields of polyamines, compared with prior-art methods in which a Raney Ni catalyst is used. The amines are useful as hardening agents for epoxy resins, plasticizers, crosslinking agents, binders for textiles, and intermediates for the prepn. of polyureas. Thus, a steel reactor (2.5-3.2 cm. diam., 70 cm. long) was filled with 487 ml. reduced 2:23:75 (at. ratio) Cr-Cu-Ni catalyst. A mixt. of 160 l. H, 145 g. NH3, and 336 g. 50% aq. polypropylene glycol (mol. wt. 400) was passed through the catalyst at 250.degree./204 atm. during 1 hr. The reactor effluent was freed of NH3 and water at 150.degree./50 mm. to give a colorless liq. in which 83.4% of the original OH groups had been converted to amine groups. The prepns. of 51% 2,9-diamino-5-methyl-4,7-dioxadecane, b50 150-5.degree.; 5% bis(8-amino-1,4-dimethyl-3,6-dioxanonyl)amine, b1.5 169-75.degree.; 18% 3-(4-amino-2-oxapentyl)-5-methylmorpholine, b5 121-30.degree.; 16% 3-(7-amino-4-methyl-2,5-dioxaoctyl)-5-methylmorpholine, b1 125-31.degree.;

21.5% 1,2,3-tris(2-aminopropoxy)propane b0.3 132-40.degree.; 19% 1,14 - diamino-9-(2-aminopropoxy)-5-methyl - 4,7,11 - trioxatetradecane, b0.7 166-9.degree.; as well as higher mol. wt. poly(oxyalkylene)polyamines in which 83-93% of the OH groups have been converted to amine groups, are similarly described.

IT **22501-88-8P**
RL: PREP (Preparation)
(prepn. of)

RN 22501-88-8 HCAPLUS

CN 2-Propanamine, 1,1'-[(1-methyl-1,2-ethanediyl)bis(oxy)]bis- (9CI) (CA INDEX NAME)



L50 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1965:472852 HCAPLUS
DOCUMENT NUMBER: 63:72852
ORIGINAL REFERENCE NO.: 63:13499g-h
TITLE: Cyclic amide solvent for linear polyureas
INVENTOR(S): Gabler, Rudolf; Mueller, Helmut
PATENT ASSIGNEE(S): W. R. Grace & Co.
SOURCE: 2 pp
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3185656		19650525	US	
PRIORITY APPLN. INFO.:			CH	19600329

AB The polycondensation of urea with aliphatic diamines to form linear, unbranched, noncross-linked polymers of high mol. wt. and satisfactory mech. properties and color is carried out in a soln. of a C1-6 lactam. Plasticizers, dyes, fillers, stabilizers, etc., can be added. Thus, heptamethylenediamine 130 and urea 60 are dissolved in pyrrolidinone 400 parts under N and heated. At 130-50.degree., NH3 is evolved. The mixt. is held at this temp. for 0.5 hr., then heated to 200.degree. for 2 hrs. and 240.degree. for 4-6 hrs. The hot soln. is stirred into 4000 parts Me2CO or MeOH and the flocculent polymers are filtered, washed, and dried. The white poly(heptamethyleneurea) m. 235-40.degree. and has a relative viscosity of 1.70 at 1 g./100 ml. in concd. H2SO4.

IT **3768-47-6**, Ethylamine, 2,2'-oxybis[1-methyl-
(reaction with urea, in lactam solvents)

RN 3768-47-6 HCAPLUS

CN 2-Propanamine, 1,1'-oxybis- (9CI) (CA INDEX NAME)